

REMARKS/ARGUMENTS

Claims 1-36 are in the case. The applicants have studied the office action mailed October 2, 2006 and believe the application is in condition for allowance. Reconsideration and reexamination are respectfully requested.

The Examiner has objected to the previously filed information disclosure statement. Filed concurrently herewith is a supplemental information disclosure statement supplying copies of the cited foreign references. Entry and consideration of these citations is respectfully requested.

The Examiner has objected to claims 1, 2 and 9 as indefinite. Claim 1 has been amended to correct the reference to the antecedent term "source device." Independent claims 13 and 25 have been amended in a similar fashion. Claim 9 has been amended to correct its dependency to provide an antecedent basis for the term "source raw storage device." Claims 21 and 33 have been amended in a similar fashion. It is respectfully submitted that the amendments are made to clarify recited features and do not narrow the scope of the claimed inventions.

The Examiner has taken the position with respect to claim 2, that the specification does not "provide ample support as to why the file is/has to be stored at a second client station." This objection is respectfully traversed. It is respectfully submitted that there are a variety of circumstances at which it may be useful to store the file at a second client station. For example, the specification at paragraph 44 provides:

[0044] Thus, if the target logical volume is unavailable (block 540) because, for example, the client station 106 hosting the target logical volume 622 or 642 is unreachable from the data storage subsystem 102 or the traffic on the network 116 is too slow for a large restore operation, the backup image data on the storage device 624 may be restored (block 530) using the database objects, to a flat file 632 at a different client station 106. The flat file 632 may be compressed if appropriate and stored on a portable medium such a compact disk or a tape cartridge and carried to the client station 106 hosting the target logical volume 622 or 642. The flat file 632 may then be uncompressed and copied to the target volume 622 or 642 by the client station hosting the target logical volume. In this manner, the entire contents of the source logical volume 520, including any file system

contained within the source logical volume 520, may be restored to a target logical volume, via a file 632.

Conversely there may be situations in which it is advantageous to store the file at the same client station as the recited “first client station”, depending upon the particular application. It is respectfully submitted that the objections to the claims should be withdrawn.

Claims 1-9, 11, 13-21, 23, 25-33, and 35 have been rejected as anticipated by the Maurer reference. Claims 10, 12, 22, 24, 34 and 36 have been rejected as obvious over the Maurer reference in view of the Hutchinson reference. These rejections are respectfully traversed.

For example, claim 1 is directed to a “data management method, comprising: backing up contents of a source device at a first client station as at least one object of a database stored in a data storage subsystem wherein the at least one object represents an image of the contents of the source device; using the at least one object, restoring the contents of the source device from the at least one object to a file in a file system stored on a storage device, said file system comprising a plurality of files and an address table identifying the location of each file on said storage device; and copying the restored contents of the source device from the file to a target device so that the target device contains the contents of the source device.” It is the Examiner’s position that the Maurer reference teaches “using the at least one object, restoring the contents of the source device from the at least one object to a file in a file system stored on a storage device” citing paragraphs 0109 and 0110 of the Maurer reference. The applicants respectfully disagree.

It is respectfully submitted that the cited paragraphs discuss a “redo log” file:

[0109] In the database there are archive files known as redo log files or simply as the redo log. This is where information that will be used in a restore operation is kept.

Without the redo log files a system failure would render the data unrecoverable. When a log switch occurs, the log records in the filled redo log file are copied to an archive log file if archiving is enabled.

[0110] Referring now to FIG. 11, the process for restoring source standard volumes is shown beginning at step 1000. Step 1002, poses an inquiry to determine if the restore is to be from the BCV's on the target or tape. In accordance with the answer the standard volumes are synchronized or restored from the target mounted BCV's or tape,

respectively in steps 1004 or 1006. Step 1008 begins the notification and cleanup steps that are generally described in FIG. 12.

The cited redo log files are apparently used in connection with a restore operation as set forth above. However, the Examiner has cited no portion of the Maurer reference which in any manner teaches or suggests that such a redo log file contains the restored contents of a source device as required by claim 1. The deficiencies of the Examiner's citations to the Maurer reference are not met by the Examiner's citations to the Hutchinson reference.

Independent claims 13 and 25 may be distinguished in a similar fashion. The rejection of the dependent claims is improper for the reasons given above. Moreover, the dependent claims include additional limitations, which in combination with the base and intervening claims from which they depend provide still further grounds of patentability over the cited art.

For example, dependent claim 11 further requires: "... wherein said file is a flat file." It is the Examiner's position that the Maurer reference teaches "wherein said file is a flat file" citing paragraph 0074 of the Maurer reference. The applicants respectfully disagree.

It is respectfully submitted that the cited paragraph discusses creating a map of the logical information to physical devices on the source computer system in the form of a flat file:

[0074] The method further includes discovering logical information related to the Standard volumes that are part of the volume group on the source computer system 113a. A map of the logical information to physical devices on the source computer system is created, preferably in the form of a flat file that may be converted into a tree structure for fast verification of the logical information. That map is used to build a substantially identical logical configuration on the target computer system 113b, preferably after the logical information has been verified by using a tree structure configuration of the logical information.

Table 2 of the Maurer reference provides an example of such mapping information. The Examiner has cited no portion of the Maurer reference which in any manner teaches or suggests that such a flat file contains the restored contents of a source device as required by claims 1 and

11. The deficiencies of the Examiner's citations to the Maurer reference are not met by the Examiner's citations to the Hutchinson reference.

The Examiner has made various comments concerning the obviousness or anticipation of certain features of the present inventions. Applicants respectfully disagree. Applicants have addressed those comments directly hereinabove or the Examiner's comments are deemed moot in view of the above response.

Conclusion

For all the above reasons, Applicant submits that the pending claims 1-36 are patentable over the art of record. Applicants have not added any claims. Nonetheless, should any additional fees be required, please charge Deposit Account No. 09-0466.

The attorney of record invites the Examiner to contact him at (310) 553-7970 if the Examiner believes such contact would advance the prosecution of the case.

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